(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 16 June 2005 (16.06.2005)

PCT

(10) International Publication Number WO 2005/054408 A1

(51) International Patent Classification⁷: C09K 21/10, C07D 251/00, 251/40, C07F 9/02, 9/22

(21) International Application Number:

PCT/US2004/039836

(22) International Filing Date:

29 November 2004 (29.11.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/525,757 29 November 2003 (29.11.2003) US 60/554,094 18 March 2004 (18.03.2004) US 60/569,413 7 May 2004 (07.05.2004) US

(71) Applicant and

(72) Inventor: KASOWSKIK, Robert, Valentine [US/US]; 2153 Brinton's Bridge Road, West Chester, PA 19382 (US).

(74) Common Representative: KASOWSKIK, Robert, Valentine; 2153 Brinton's Bridge Road, West Chester, PA 19382 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PROTECTIVE BARRIER COMPOSITION COMPRISING REACTION OF PHOSPHOROUS ACID WITH AMINES APPLIED TO A SUBSTRATE

(57) Abstract: This invention relates to flame barrier compositions as well as a method for the preparation of the flame barrier compositions formed from a flame retardant composition and water. A protective barrier comprises a flame barrier composition or a flame barrier polymer on top of a layer or sandwiched between two or more layers of glass, wood, paper, polymer films, and other layered materials as well as mixtures of layers.

